

align the medium in the lateral direction, wherein the feed assistance member is mounted between the lateral and vertical align rollers.

REMARKS

1. The Amendments to the Claims Should Be Entered

Applicants amended claim 1 to use the term align roller to refer to the structure that feeds the medium, which is the term used in the other independent claims 2 and 10 for this component. Thus, this amendment does not raise any new issues as a term in one claim has been changed to be consistent with the terms used in the other claims.

Applicants have amended independent claims 1, 2, and 10 to specify that the roller is not vertically aligned with the any align roller. This amendment does not raise any new issues because claims 3 and 12 recite that the feed assistance member, which includes the roller, is between the align rollers. Thus, claims 3 and 12 already recite that the roller is not vertically aligned with the align rollers. Because the current claims already recite that the roller is not vertically aligned with the align rollers, Applicants request the Examiner to enter this amendment to the claims that does not raise any new issues in order to expedite prosecution.

Moreover, the Application expressly discloses that the feed rollers are not vertically aligned with any of the align rollers. For instance, FIG. 1 shows the weight idler 110 is not vertically aligned with any of the align rollers 141, 143, and 151. (Application, pgs. 8-9)

2. The Claims Are Patentable Over the Cited Art

Claim 1 recites a feed assistance apparatus arranged in a feed path of a medium to be processed in a medium processing apparatus. The feed path includes at least one feed roller of non-circular cross section for feeding the medium. The feed assistance apparatus comprises a roller portion contacting the medium being fed to increase a frictional force generated on the medium and a shaft portion supported in a bracket and disposed through the roller portion. The roller portion rotates around the shaft portion so as to move by the thickness of the medium such that the shaft portion is not rotably connected to the feed roller.

Claim 1 further recites that the feed roller portion is not vertically aligned with any align roller.

The Examiner cited FIG. 3 of DeFalco as showing a feed assistance roller 55. (Final Office Action, pg. 2) According to DeFalco, the lobed rollers 44, 46, and 55 cooperate with counter rollers 45, 47, and 59 that apply weight to the top of the medium that is being fed by rollers 44, 46, and 55. (DeFalco, col. 2, lines 32-49) Rollers 44, 46, and 55 are moved by a rotating shaft. (DeFalco, col. 4, lines 34-41). However, FIG. 1 of DeFalco shows that the rollers 44, 46, and 55 are vertically aligned with the idler rollers 45, 47, and 59 that apply weight to the paper being fed by rollers 44, 46, and 55.

Independent claim 1 requires that the roller not be vertically aligned with the align rollers. The Examiner has not cited any part of DeFalco that teaches or suggests that the rollers 44, 46, and 55 are not vertically aligned with the idler rollers 45, 47, and 59. In fact, DeFalco describes just the opposite because the rollers 45, 47, and 49 in DeFalco are vertically aligned with the transport rollers 44, 46, 55. For this reason, the claims are distinguished from DeFalco.

Moreover, the "Background Art" section of the Application specifically discusses the DeFalco patent. In discussing DeFalco, the Application mentions problems with the structure of DeFalco where the oval shaped align rollers can contact the idler rollers. (Application, pg. 3, lines 6-17) To address these problems, the Application discloses a roller arrangement shown in FIG. 1 where the feed roller 110 that applies weight to the paper is not vertically aligned with any of the align rollers 141, 143, and 151.

Independent claims 2 and 10 recite feed assistance members having feed assistance rollers that are not vertically aligned with the align rollers that align the medium in the path. For the reasons discussed with respect to claim 1, claims 2 and 10 are distinguished over DeFalco because claims 2 and 10 require that the feed assistance member that applies pressure to the medium is not vertically aligned with any of the align rollers.

The Examiner found that the functional recitations of claim 1 are not given patentable weight because there are not supported by claim structure. Applicants traverse the relevance of

this finding with respect to the current independent claims because the structural requirements of independent claims 1, 2, and 10 distinguish over DeFalco.

Claims 3-9 and 11-17 are patentable over the cited art as they depend from claims 2 and 10, which are patentable over the cited art for the reasons discussed above. Claims 3, 7, 12, and 16 provide further grounds of patentability over the cited art.

Claims 3 and 12 depend from claims 1 and 10 and further recite one vertical align roller to align the medium in the vertical direction and a lateral align roller to align the medium in the lateral direction, wherein the feed assistance member is mounted between the lateral and vertical align rollers. DeFalco, in FIG. 1, as discussed, shows the idler aligned vertically with respect to the align rollers. Thus, claims 3 and 12 provide further grounds of distinction over the cited art for their requirement that the feed assistance member is mounted between the lateral and vertical align rollers.

Claims 7 and 16 depend from claims 2 and 10 and further recite that the total weight of the feed assistance roller is applied onto the medium. The Examiner found the col. 2, lines 41-49 of DeFalco taught this requirement. (Final Office Action, pg. 3) Applicants traverse.

The cited col. 2, lines 41-49 of DeFalco mentions that the weight of the rollers and the friction of rubber 50 is sufficient to transport sheets of paper. Rubber 50 is the layer of rubber covering the lobes of the rollers 44, 46, 55 that transport the paper. (DeFalco, col. 2, lines 19-21). This cited section nowhere mentions the claim requirement that the total weight of the feed assistance roller, or what DeFalco calls the rollers 45, 47, and 58, is applied onto the medium. Instead, DeFalco only mentions that the weight of the idler rollers and friction of the rubber 40 on the rollers that transport the paper, lobed rollers 44, 46, 55, is sufficient to permit the paper to move through the vertically aligned rollers. For these reasons, claims 7 and 16 provide further grounds of patentability over the cited art.

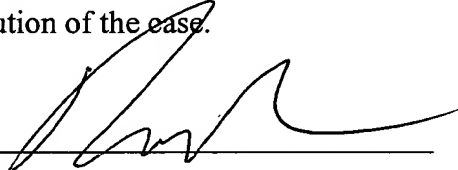
Conclusion

For all the above reasons, Applicant submits that the pending claims 1-17 are patentable over the art of record. No fee is required because no claims were added. Nonetheless, should any additional fees be required, please charge Deposit Account No. 50-0585.

The attorney of record invites the Examiner to contact him at (310) 553-7977 if the Examiner believes such contact would advance the prosecution of the case.

Dated: September 28, 2000

By: _____


David W. Victor
Reg. No.: 39,867

Please direct all correspondences to:

David Victor
Konrad Raynes & Victor LLP
1180 South Beverly Drive, Ste. 501
Los Angeles, CA 90035
Tel: 310-553-7977
Fax: 310-556- 7984